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20

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25

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35

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Val Pro Gly Val Tyr Cys Leu Cys Val Leu Tyr His Gly Tyr Ile Tyr

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90

95

100

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Ser Leu Gln Ile Asp Phe Ser Lys Cys Ala Ile Gln Asn Ala Pro Asn			
130	135	140	
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gtg cag cct aag aag ctt ccc tgc aga ggc cag act acc tgc cga gga	528		
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275	280 285
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325

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340

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<213> Homo sapiens

<400> 11

atggtaccca gtttcaaatt aacatggta ttttacttgt gttcccaaat ttaacattag 60

ggaatttttg gttgtgggtc tgttatcact agaaaaatat atatattggi gctgaagata 120

attttgagat aattagacna gacagtttag catttacaag aacaagtttg gcagtgaag 180

aattctattta tatgact 197

<210> 12

<211> 137

<212> DNA

<213> Homo sapiens

<400> 12

ccaccgcacc tggctgatgc tttctatctt gacttctttc agaggacctt gaaagacact 60

aagtggaaac tttctttgaa gtttccaag ctaaaacaat tctctggaaa gatcacctct 120



gttcagtcctt ggtctctt

137

<210> 13

<211> 274

<212> DNA

<213> Homo sapiens

<400> 13

cgtttacaga ttctcttgcg gctggcggcg gaactacaaa gggatcggcg cctatatcac 60

aataccaaac ttgataataa tctagattct gtgtyctgc ttatagacca tgtttgtagt 120

aggtaagagg aaaacttcct atattctgaa acagcctaac attttacaaz attttagttt 180

tcttttttag agtcttatcc tctagclala taacagttca tctctgattt agcatttggt 240

cacgagttaa gctggaacta tgaaaattga aaat 274

<210> 14

<211> 171

<212> DNA

<213> Homo sapiens

<400> 14

gattaggtga ccttccttga aragccacgg gtttcccatn tngaatgct attcattacc 60

cgagtcacct angttcttac aaaggaagcg agaaaattgc ttttgttggg ccattgccct 120

tttgcanaagg ttcttaagta tagtcgcan aattttttta atggcctana g 171

<210> 15

<211> 161

<212> DNA

<213> Homo sapiens

<400> 15

aggggcgctt gttctgctct cagcagattg gttacacgcg tcaggatggig gcgatgactt 60

aattcctagc ccaagaagaa tataatgtta aaactgggta tgaattttt gtgcctctcc 120

tttttaatgc agtatcttagt tcagatgttg gcgatttttc a 161

<210> 16

<211> 323

<212> DNA

<213> Homo sapiens

<400> 16

tataaggwgg gaaccttact atctctaatg accttactga tgcctgacttt aatactctgt	60
gaaggttaga gttcagtga tcttacctag aaacagcccc ggctgtggaa tactttattc	120
ttagcccat atttgggggt tggatgtcca ctgtgctggt tccagagat agtangggga	180
tgagagtatt ggttacatct cctgaccac atacttaaga tccagatgaa caagacagtt	240
ttcctctctg ctggtagaa cctatttgyk shaggaaaca gytctaaag aatggttcta	300
gccagacctt gtcgytacca gaa	323

<210> 17

<211> 138

<212> DNA

<213> Homo sapiens

<400> 17

agtatgacaa atagttctg cctgattggt gagatttggg atgggcccc accttgttc	60
tcctctgca taaaaatttc aacattttta caaaattttc aaaaacttct cctcagtctg	120
tacatctttg ttaatcag	138

<210> 18

<211> 135

<212> DNA

<213> Homo sapiens

<400> 18

tgatccccac aatttcttgt gattggtag gaactataaa tgactcccat ccaagcttat 60

accagaaaaa aggagcacat ttctacaaa ttatatcatt ttaatccat taccacatta 120

tttagggga actac 135

<210> 19

<211> 219

<212> DNA

<213> Homo sapiens

<400> 19

ctgagaggag ccatgtatc aaaccacttt ttctaacatg gcttttatta aactttgaat 60

ataagtacac ctgctcgaag tgttcattta tattatttaa gaacaagcaa ctgtaaaaca 120

gtaaaaatcac aaaaggtaag ttgttggaag acaacaaaaa agaattacta tatcigatcc 180

tgcggtgttta ttttagaata tgttaataagg cctacagct

219

<210> 20

<211> 191

<212> DNA

<213> Homo sapiens

<400> 20

acagtgagtg tggctgaaac ctaagctgaa ggaagggagg agcaggcact gccatgaggg 60

gtccctggac agaaactctt cagcaggcct tgaagtttag ttcaggggct acatggaata 120

ccactattta gcacacaggt gtgatctgag gtgagggact accttttcga tcttggtttt 180

ctcatttatt t 191

<210> 21

<211> 148

<212> DNA

<213> Homo sapiens

<400> 21

ctggagggtga agggaaggaa agaaaggaaa aactatctac ctggcaggaa aagagataag 60

ctcccaagaa cacczaagca galgaatgagt ctgctctac ccagccttc ccccaagaa 120

ccagatcat agtaagaac tctgggc 148

<210> 22

<211> 306

<212> DNA

<213> Homo sapiens

<400> 22

ccaccaccag aaatgaaca aaagcatttt acctaaaaat acaccagcaa aatgtactca 60

gcttcaatca caaatagac tgcttaaac cgcagaaatt tctcaaac tcagccttta 120

tcactcagct ggattttttc ctcaacaat cactactcca agcattgggg aacacaactt 180

ttaatcalac tccagtcgtt tcacaatgca ttctaatagc agcgggatca gaacagtact 240

gcatttactt gccaacagaa cagacagacc tgaagtcaag acaactgcat tctctgtgaa 300

gtctgt 306

<210> 23

<211> 357

<212> DNA

<213> Homo sapiens

<400> 23

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gtagcatttt ggcagaacca ttgttaatta aagggactty tggaccgcaa cyttaatgta      60
ccagattatt gagcrgccca atgaatgctt cattctcatt gittaagggtg ctgcttggat    120
tttttttca attctttgta ctatttttta ttttttggag aggcacatcc cczaattlly      180
atgagggtatt tgttgataaa taattcatca atttccacaa tgcagacaaa aatgtctgcc      240
cagagtggaa aaataaaaca agggggagaa gagtttgagt aacggagaag ttctgtggaa      300
tcctagtgc aaaagttgag aaactacctt laaataagac agtgaggtaa caaatgt         357
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<210> 24

<211> 219

<212> DNA

<213> Homo sapiens

<400> 24

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tggaatagcc aggagaattc tggaaaagta gaataatgag gtagggttcc ccttcgctat      60
tttgaagtgc agattacact atgtaaaacc attaggaact ggcacgtgaa tagacagatc     120
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aatagtiiaa agctgtatta gccagaaaat gggtgttagga cnaacaggcta actaaccttg 180

tcacttgtta tgcataaatt aagctctaga agagtcctc 219

<210> 25

<211> 251

<212> DNA

<213> Homo sapiens

<400> 25

tgaagggga atagaagcac aagagtcagt aatcaataac aaacaactca aggtgtctct 60

tccttacact ggtgttcccc aaagtgaggt gaattgccag ccactgggag tcagggccag 120

ttacataaga catctctggt aagccccctt tgggtatccc aaataaggac tggggtgggt 180

ttatgtgtag tccattatta acaactaac gaacaaacct agtgaattgc aataaattca 240

caccaacaga a 251

<210> 26

<211> 233

<212> DNA



<213> Homo sapiens

<400> 26

gttgaagag tcttgggaag gcttttagac caaacccctc tgcattgctca arccctgggt 60

acaggatttc taagaagtgz aacagtctcc aggggtgtgg arctcatcgc tcaaggcagg 120

ttatcttata tgaataattt tgtctgttga ctattgggat agttctcctt cagatgagct 180

gaaattttct ccatagcttc ctctattaa cccaattcca ctctcaggg tca 233

<210> 27

<211> 176

<212> DNA

<213> Homo sapiens

<400> 27

caaaagcgct gaagttaagc attaatagc cagattcatg atttatgac agtatccaaa 60

actccaacta caaacaatgc aaagtagtgc tctcagtat tatttttgca attgttagta 120

atgttaagca tcaaggaaaa taaaacacat cattgcacat tacagccgca aaaaac 176

<210> 28

<211> 241

<212> DNA

<213> Homo sapiens

<400> 28

agagagtaaa gcaagctatt ttgacagcaa cctaataaca gctgtcttct tccacttctt 60

ggctaactca tccccagat agccttcttt tctcttatch attccctgtt gcaacaataa 120

taaatgccac aactgatgga gtcattagga actttcttag tgacaagtgc ctaggacaga 180

ggagaaaaca aagaaacact gacaaccact gaaaactgac atatcaggcc aggcatgtca 240

c 241

<210> 29

<211> 217

<212> DNA

<213> Homo sapiens

<400> 29

gctggagagg tggatgatgt gctgaataat tgcctttttaa agctggaggg gacttccaag 60

agtctctcat ttaagaaran aaattaaaga cataatttggc aacggcttttg actgctgcag 120

aggcaacact ttgtcaca tctacagat ctacttcacc tgaactaca attttctga 180

agacatagaa gaaaaatcaa ttgttctaatt ccatatg 217

<210> 30

<211> 233

<212> DNA

<213> Homo sapiens

<400> 30

aattcttagca taatgcttcc tgggaaattc tgaattgat tccattttctg ccgttacaaa 60

cacacacgaa gtccctagtt cactgggact tcttgatttg ttcttttagc ttgtcccttc 120

tcacctagaa gctctgttta tttctgagca accctggggc ttgtctcata ggacaggatt 180

tatttatctc atcaaggctg agtgtgcctt aggaagtcac aaacataaaa aga 233

<210> 31

<211> 228

<212> DNA

<213> Homo sapiens

<400> 31

tatagacagg gtagggacga ttggcccttc gacaactttt cacaataata cacacgttta 60

actacctctc aggtcatgat aaagaccggc cgggcagaaa cactgtaatc ccagctactc 120

gggagcctga ggcatgagaa tcacttgaac ctgggagggtg gaggttgccg tagaccgaga 180

tcacgccatt gcaatcacgc ctggcgaca agagtgaaac tccatctg 228

<210> 32

<211> 298

<212> DNA

<213> Homo sapiens

<400> 32

gcttatgatt acaaacatcc ctcatatgaa aatctcagca tttnctggct gctgccctca 60

atcgcttttt ctgaaatagg tatcccttga tgcgactat ttgatttcag ccagtcgttt 120

ctctctggca gtgctccctg caaatgtgtc cttcaagaa aacaaaacct gcaagtggct 180

tgtaatgtac catgacctta tcatgtgaag gacaaatggc tcttgtgctt attagatagc 240

agatgaactg atgaactgaa ttcttggctt gaagcttga taaggtcaga tgcctttg 298

<210> 33

<211> 291

<212> DNA

<213> Homo sapiens

<400> 33

acttcgaagg gaaaaagagg aaggaaaagg actgttata aaataacaaa ggcagcaatc 60

agaatgaacc agagccagga cagcgtaaag gctaggttca cagtgagatg aaagaacctg 120

aaaacaagtt taanaactcaa aagaggatta ttctcaagtt atactacagt gaaaaaacat 180

ggaaaaacac aaaaaggaca ggcaataagg cacaggcatu catacaaggc aaattgtaac 240

acaatatatta cttgcaaaag agcccacaga gacatgtcaa tgaagtcata g 291

<210> 34

<211> 230

<212> PRT

<213> Homo sapiens

<400> 34

Met Glu Asp Gly Phe Leu Asp Asp Gly Arg Gly Asp Gln Pro Leu His

i 5 10 15

Ser Gly Leu Gly Ser Pro His Cys Phe Ser His Gln Asn Gly Glu Arg

20 25 30

Val Glu Arg Tyr Ser Arg Lys Val Phe Val Gly Gly Leu Pro Pro Asp

35

40

45

Ile Asp Glu Asp Glu Ile Thr Ala Ser Phe Arg Arg Phe Gly Pro Leu

50

55

60

Ile Val Asp Trp Pro His Lys Ala Glu Ser Lys Ser Tyr Phe Pro Pro

65

70

75

80

Lys Gly Tyr Ala Phe Leu Leu Phe Gln Asp Glu Ser Ser Val Gln Ala

85

90

95

Leu Ile Asp Ala Cys Ile Glu Glu Asp Gly Lys Leu Tyr Leu Cys Val

100

105

110

Ser Ser Pro Thr Ile Lys Asp Lys Pro Val Gln Ile Arg Pro Trp Asn

115

120

125

Leu Ser Asp Ser Asp Phe Val Met Asp Gly Ser Gln Pro Leu Asp Pro

130

135

140

Arg Lys Thr Ile Phe Val Gly Gly Val Pro Arg Pro Leu Arg Ala Val

145

150

155

160

Glu Leu Ala Met Val Met Asp Arg Leu Tyr Gly Gly Val Cys Tyr Ala

165

170

175

Gly Ile Asp Thr Asp Pro Glu Leu Lys Tyr Pro Lys Gly Ala Gly Arg  
180 185 190

Val Ala Phe Ser Asn Gln Gln Ser Tyr Ile Ala Ala Ile Ser Ala Arg  
195 200 205

Phe Val Gln Leu Gln His Gly Glu Ile Asp Lys Arg Val Ser Leu Ile  
210 215 220

Leu His Phe Gly Lys Phe  
225 230

<210> 35

<211> 143

<212> PRT

<213> Homo sapiens

<400> 35

Met Gly Ser Asp Lys Arg Val Ser Arg Thr Glu Arg Ser Gly Arg Tyr  
1 5 10 15

Gly Ser Ile Ile Asp Arg Asp Asp Arg Asp Glu Arg Glu Ser Arg Ser  
20 25 30

Arg Arg Arg Asp Ser Asp Tyr Lys Arg Ser Ser Asp Asp Arg Arg Gly

35	40	45
Asp Arg Tyr Asp Asp Tyr Arg Asp Tyr Asp Ser Pro Glu Arg Glu Arg		
50	55	60
Glu Arg Arg Asn Ser Asp Arg Ser Glu Asp Gly Tyr His Ser Asp Gly		
65	70	75
Asp Tyr Gly Glu His Asp Tyr Arg His Asp Ile Ser Asp Glu Arg Glu		
85	90	95
Ser Lys Thr Ile Met Leu Arg Gly Leu Pro Ile Thr Ile Thr Glu Ser		
100	105	110
Asp Ile Arg Glu Met Met Glu Ser Phe Glu Gly Pro Gln Pro Ala Asp		
115	120	125
Val Arg Leu Met Lys Arg Lys Thr Gly Glu Ser Leu Leu Ser Ser		
130	135	140

<210> 36

<211> 104

<212> PRT

<213> Homo sapiens

<400> 36



Met Pro His Met Leu Ser Gln Leu Ile Ala Gly Gly Val Ser Thr Ser

1 5 10 15

Cys Val Thr Ala Leu Gly Glu Glu Thr Gly Ala Trp Phe Pro Val Tyr

20 25 30

Leu Ser His Ala Ser Ser Pro Phe Ala Asp Leu Val Phe Cys Pro Phe

35 40 45

Ala Glu Ile Asn His Ser Gln Glu Tyr Asp Asn Met Arg Gly Pro Val

50 55 60

Ser Pro Pro Asn Lys Gln Phe Asn Leu Gly Val Ile Phe Gly Ile Pro

65 70 75 80

Asn Asn Cys Arg Phe Pro Thr Asp Asn Lys Ile Thr Glu Lys Gln Leu

85 90 95

Leu Gly Asn Val Leu Asn Tyr Pro

100

<210> 37

<211> 133

<212> PRT

<213> Homo sapiens

<400> 37

Met Asn His Pro Trp His Val Cys Phe Leu Phe Lys Val Leu Arg Tyr

1 5 10 15

Tyr Pro Thr Ala Pro Ile Leu Lys Trp Thr His Thr Val Ser Cys Ser

20 25 30

Trp Cys Arg Ser Val Leu Arg Glu Val Val Gly Asn Val Ser Leu Ser

35 40 45

Glu Asn Phe Thr Ile Ser Ala Phe Cys Pro Glu Leu Thr Pro Phe Pro

50 55 60

Asp Gln Gly Thr Ser Thr Met Ile Ser Phe Leu Glu Lys Phe Asn Lys

65 70 75 80

Ser Lys Arg Glu Arg Leu Glu Leu Met Leu His Phe Tyr Ser Val Leu

85 90 95

Ser Leu Glu Pro Ala Val Ala Glu His Trp Ser Gly Glu Phe Glu Lys

100 105 110

Trp Lys Val Gly Phe Phe His Pro Leu Lys Arg Glu Asp Gly Phe Phe

115 120 125

Thr Arg Thr Asp Ile

130

<210> 38

<211> 133

<212> PRT

<213> Homo sapiens

<400> 38

Met Asn His Pro Trp His Val Cys Phe Leu Phe Lys Val Leu Arg Tyr

1 5 10 15

Tyr Pro Thr Ala Pro Ile Leu Lys Trp Thr His Thr Val Ser Cys Ser

20 25 30

Trp Cys Arg Ser Val Leu Arg Glu Val Val Gly Asn Val Ser Leu Ser

35 40 45

Glu Asn Phe Thr Ile Ser Ala Phe Cys Pro Glu Leu Thr Pro Phe Pro

50 55 60

Asp Gln Gly Thr Ser Thr Met Ile Ser Phe Leu Glu Lys Phe Asn Lys

65 70 75 80

Ser Lys Arg Glu Arg Leu Glu Leu Met Leu His Phe Tyr Ser Val Leu

85 90 95

Ser Leu Glu Pro Ala Phe Ala Glu His Trp Ser Gly Glu Phe Glu Lys

100                      105                      110  
 Trp Lys Val Gly Phe Phe His Pro Leu Lys Arg Glu Asp Gly Phe Phe  
 115                      120                      125

Thr Arg Thr Asp Ile  
 130

<210> 39

<211> 128

<212> PRT

<213> Homo sapiens

<400> 39

Met Asp Ala Val Ala Val Tyr His Gly Lys Ile Ser Arg Glu Thr Gly  
 1                      5                      10                      15

Glu Lys Leu Leu Leu Ala Thr Gly Leu Asp Gly Ser Tyr Leu Leu Arg  
 20                      25                      30

Asp Ser Glu Ser Val Pro Gly Val Tyr Cys Leu Cys Val Leu Tyr His  
 35                      40                      45

Gly Tyr Ile Tyr Thr Tyr Arg Val Ser Gln Thr Glu Thr Gly Ser Trp  
 50                      55                      60

Ser Ala Glu Thr Ala Pro Gly Val His Lys Arg Tyr Phe Arg Lys Ile  
65 70 75 80

Lys Asn Leu Ile Ser Ala Phe Gln Lys Pro Asp Gln Gly Ile Val Ile  
85 90 95

Pro Leu Gln Tyr Pro Val Glu Lys Lys Ser Ser Ala Arg Ser Thr Gln  
100 105 110

Gly Thr Thr Gly Ile Arg Glu Asp Pro Asp Val Cys Leu Lys Ala Pro  
115 120 125

<210> 40

<211> 343

<212> PRT

<213> Homo sapiens

<400> 40

Met Asp Ala Pro Lys Ala Gly Tyr Ala Phe Glu Tyr Leu Ile Glu Thr  
1 5 10 15

Leu Asn Asp Ser Ser His Lys Lys Phe Phe Asp Val Ser Lys Leu Gly  
20 25 30

Thr Lys Tyr Asp Val Leu Pro Tyr Ser Ile Arg Val Leu Leu Glu Ala  
35 40 45

Ala Val Arg Asn Cys Asp Gly Phe Leu Met Lys Lys Glu Asp Val Met

50

55

60

Asn Ile Leu Asp Trp Lys Thr Lys Gln Ser Asn Val Glu Val Pro Phe

65

70

75

80

Phe Pro Ala Arg Val Leu Leu Gln Asp Phe Thr Gly Ile Pro Ala Met

85

90

95

Val Asp Phe Ala Ala Met Arg Glu Ala Val Lys Thr Leu Gly Gly Asp

100

105

110

Pro Glu Lys Val His Pro Ala Cys Pro Thr Asp Leu Thr Val Asp His

115

120

125

Ser Leu Gln Ile Asp Phe Ser Lys Cys Ala Ile Gln Asn Ala Pro Asn

130

135

140

Pro Gly Gly Gly Asp Leu Gln Lys Ala Gly Lys Leu Ser Pro Leu Lys

145

150

155

160

Val Gln Pro Lys Lys Leu Pro Cys Arg Gly Gln Thr Thr Cys Arg Gly

165

170

175

Ser Cys Asp Ser Gly Glu Leu Gly Arg Asn Ser Gly Thr Phe Ser Ser

180

185

190

Gln Ile Glu Asn Thr Pro Ile Leu Cys Pro Phe His Leu Gln Pro Val  
195 200 205

Pro Glu Pro Glu Thr Val Leu Lys Asn Gln Glu Val Glu Phe Gly Arg  
210 215 220

Asn Arg Glu Arg Leu Gln Phe Phe Lys Trp Ser Ser Arg Val Leu Lys  
225 230 235 240

Asn Val Ala Val Ile Pro Pro Gly Thr Gly Met Ala His Gln Ile Asn  
245 250 255

Leu Glu Tyr Leu Ser Arg Val Val Phe Glu Glu Lys Asp Leu Leu Phe  
260 265 270

Pro Asp Ser Val Val Gly Thr Asp Ser His Ile Thr Met Val Asn Gly  
275 280 285

Leu Gly Ile Leu Gly Trp Gly Val Gly Gly Ile Glu Thr Glu Ala Val  
290 295 300

Met Leu Gly Leu Pro Val Ser Leu Thr Leu Pro Glu Val Val Gly Cys  
305 310 315 320

Glu Leu Thr Gly Ser Ser Asn Pro Phe Val Thr Ser Ile Asp Val Val  
325 330 335

Leu Gly Ile Thr Lys Val Ser

340

<210> 41

<211> 305

<212> DNA

<213> Homo sapiens

<400> 41

tcatgaagtg aagccaactg tttagactag aatgttatga gattaaaccc acnnnnnnntt 60

attcatagac ataaacccctc attttaalla gtggatctgg atttttgtca tatgtggaal 120

cataatttaa acaaaatcaa ctaagatgat ccaagttcca cacaactgca cticaatatt 180

caagtcggtg tgaagatgcc tgactactgc gtcacaagat tctgagctgt cgtaaaaagc 240

ctggctcgtg gtttctatct atagtgtaca catgttgggt tatatcaca aacctggaac 300

tctgt 305

<210> 42

<211> 256



<212> DNA

<213> Homo sapiens

<400> 42

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gaaaccacgg ctacaccta gagacagcat tcagatatag acgggatact tgggttagtc      60
agttccttta taacaggiga atctctctcc cactgcttca acactgcgtg acaagccaa      120
tgggaagca gctttacaaa tggacttga cttggggatc ttcttgatac ttgccatgg      180
caaggaacaa gccgcctgaa ctaaatgcca ctccatttga ttccacgctt aaagtaacca      240
tgcaaccgac tatagt                                     256
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<210> 43

<211> 244

<212> DNA

<213> Homo sapiens

<400> 43

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tactcttcaa ccatgatttt tctctgattg cctgtgtgaa cagattaatg ggtccatct      60
aatcctttcc ccactggggg aaagcaaatc atcaggccca ttgcaaaaac tgcctcttgg      120
tgagcttctt gccctaaatc ataccacag tgaatggcgt ccttttatca ccgtcaatga      180
```

cctcagacac tctctccact cacatgtgag cctcctcagc tctcganuaa caagtongtc 240

tcgg 244

<210> 44

<211> 258

<212> DNA

<213> Homo sapiens

<400> 44

tctcagaaaa ctcagatca aatgagatga gtatggtggn nagggtctggc aattagagga 60

tactctccaa tggatgatga gggagatgtc tgggggaaat ccagcaggat gttgatttag 120

tatgtacaca gtgagaggat acttgttagag aacctagaat ctctcttgaa tgtgacgggc 180

cctcagagat aattgttaac agataagtgg atgattaaat acacttcctc cagtaggcta 240

gatgttaaga cggagatc 258

<210> 45

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 45

gggcttaata ttattcatag atcgag

26

<210> 46

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 46

gttattatac tatzagtaa cccuac

26

<210> 47

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 47

gtggatctgg atttttgtca tatgt

25

<210> 48

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 48

gtttgtgatt ataaccacaac atgtg

25

<210> 49

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 49

gaaggggaag agacattaaa ttatc

25

<210> 50

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 50

gcttctaaat ctctgagtc actt

24

<210> 51

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 51

gacaatgagt aagaagaaag aggg

24

<210> 52

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 52

gtccagtc cc ttggtttatt tgtc

24

<210> 53

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 53

ggtacccagt ttcaaattaa catgg

25

<210> 54

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 54

gattcttcaa ctgccaaact tgttc

25

<210> 55

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 55

gctgatgctt ttctatctga cttc

24

<210> 56

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 56

gaccaggact gaacagagg- ga

22

<210> 57

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 57

gcttatagac catgtttgta gtagg

25

<210> 58

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 58

gtgaacaaat gctaaatcag acatg

25



<210> 59

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 59

gccacgggtt tcccatatcg aa

22

<210> 60

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 60

gactatactt aggaacctct gcaa

24

<210> 61

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 61

gttctgctct cagcagattg gtta

24

<210> 62

<211> 24

<212> DNA

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<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 62

gccaacatct gaactaaata ctgc

24

<210> 63

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 63

gttcagtgaatgttacctagaaaca

25

<210> 64

<211> 24

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:Synthetic DNA

<400> 64

ggagtgaaaaatgtcttggatcatc

24

<210> 65

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 65

gatatgacaaa tagtttctgc ctgat

25

<210> 66

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 66

gattaacaaa gatgtacaga ctgag

25

<210> 67

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 67

gagacagcat tcagatatag acgg

24

<210> 68

<211> 22

<212> DNA

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<223> Description of Artificial Sequence:Synthetic DNA

<400> 68

gcgtggaatc aaatggagtg gc

22

<210> 69

<211> 24

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:Synthetic DNA

<400> 69

gatggcctgt gtgaacagat taat

24

<210> 70

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 70

gagagagatg tcagagtcac tagc

24

<210> 71

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 71

gatccccaca attctttgtg attg

24

<210> 72

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 72

gttcccctaa aataatgtgg laalg

25

<210> 73

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 73

gaggatactc tccaatgggtg atg

23

<210> 74

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 74

gtcttaacat ctatgcctact ggag

24

<210> 75

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 75

gagaggagcc atgtatacaa acca

24

<210> 76

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 76

gcacgcagga tcagatatag taattc

25



<210> 77

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 77

gctgaaacct aagctgaagg aagg

24

<210> 78

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 78

gtccctcacc tcagatcaca cc

22

<210> 79

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 79

gctatctacc tggcaggaaa agag

24

<210> 80

<211> 25

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:Synthetic DNA

<400> 80

gagtttctta ctatgatctg gattc

25

<210> 81

<211> 25

<212> DNA

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<223> Description of Artificial Sequence:Synthetic DNA

<400> 81

gcaaaatgta ctcagcttca atcac

25

<210> 82

<211> 24

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:Synthetic DNA

<400> 82

gtaaatgcag tactgttctg atcc

24

<210> 83

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 83

gaatgcttca ttctcattgt ttaagg

25

<210> 84

<211> 24

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:Synthetic DNA

<400> 84

gtcactagga ttccacagaa ctcc

24

<210> 85

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 85

gaggtagggc ttcccttcgc ta

22

<210> 86

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 86

gcataacaag tgacagggtt agtta

25

<210> 87

<211> 22

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:Synthetic DNA

<400> 87

ggtagctcctt ccttacactg gt

22

<210> 88

<211> 23

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:Synthetic DNA

<400> 88

gactacacat aaacccaccc cag

23

<210> 89

<211> 24

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:Synthetic DNA

<400> 89

gggtacagga ttcttaagaa gtgg

24

<210> 90

<211> 25

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:Synthetic DNA

<400> 90

ggagaaaatt tcagctcatc tgaag

25

<210> 91

<211> 24

<212> DNA

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<223> Description of Artificial Sequence:Synthetic DNA

<400> 91

gctgaagtta agcattaata cgcc

24

<210> 92

<211> 23

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:Synthetic DNA

<400> 92

gcggctglaa tgtgcaatga tgt

23

<210> 93

<211> 24

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:Synthetic DNA

<400> 93

gacagcaacc taataacagc tgtc

24

<210> 94

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 94

gtcctaggca ctgtcacta gg

22



<210> 95

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 95

gaggggactt ccaagagtct ct

22

<210> 96

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 96

gtcttcagga aaattgtagt tacag

25

<210> 97

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 97

gttacaaca cacacgaagt tcct

24

<210> 98

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 98

gacttcttaa ggcacactca gc

22

<210> 99

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 99

gtttaactac ctctcaggtc atga

24

<210> 100

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 100

gtcgccaagg ctgtagtgca at

22

<210> 101

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 101

gaaataggta tcccttgaig tcga

24

<210> 102

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 102

gaccaagaat tcagttcatc agtt

24

<210> 103

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 103

gaatgaacca gagccaggac ag

22

<210> 104

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 104

gccttgatatg tatgcctgtg cc

22

<210> 105

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA :

<400> 105

aagagtcac caggccatgg a

21

<210> 106

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 106

taccttgtgt acttctagct gag

23

<210> 107

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 107

gttttttttt tttttta

17

<210> 108

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 108

gttttttttt ttttttg

17

<210> 109

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 109

gttttttttt ttttttc

17

<210> 110

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 110

cagagtgatg gatatcaa

18

<210> 111

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 111

atgaaagtgc cagtgtgcca tg

22

<210> 112

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 112

cccatcacca tcttccagga gc

22



<210> 113

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 113

ttcaccacct tcttgatgtc atcata

26

<210> 114

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic Peptide

<400> 114

Cys Pro Leu Lys Arg Glu Asp Gly Phe Phe Thr Arg Thr Asp Ile

1

5

10

15

<210> 115

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<221> MOD\_RES

<222> (16)

<223> AMIDATION, GluAmide

<400> 115

Cys Ser Phe Leu Glu Lys Phe Asn Lys Ser Lys Arg Glu Arg Leu Xaa

1

5

10

15

<210> 116

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<221> MOD\_RES

<222> (15)

<223> AMIDATION. GlyAmide

<400> 116

Cys Ala Glu His Trp Ser Gly Glu Phe Glu Lys Trp Lys Val Xaa  
1 5 10 15

<210> 117

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic Peptide

<400> 117

Cys Glu Ile Asp Lys Arg Val Ser Leu Ile Leu His Phe Gly Lys Phe  
1 5 10 15

<210> 118

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic Peptide

<400> 118

Cys Arg Leu Met Lys Arg Lys Thr Gly Glu Ser Leu Leu Ser Ser  
1 5 10 15

<210> 119

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic Peptide

<400> 119

Cys Thr Ser Ile Asp Val Val Leu Gly Ile Thr Lys Val Ser  
1 5 10

<210> 120

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<221> MOD\_RES

<222> (16)

<223> AMIDATION. LysAmide

<400> 120

Cys Ser Ala Glu Thr Ala Pro Gly Val His Lys Arg Tyr Phe Arg Xaa

1 5 10 15

<210> 121

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic Peptide

<400> 121

Cys Lys Ile Thr Glu Lys Gln Leu Leu Gly Asn Val Leu Asn Tyr Pro

1 5 10 15